## Summer 2011 Weather Summary for Northeast Montana

**June...**. was cooler and wetter than normal. For most places too, it was the 8th month in a row to be cooler than normal, with 7 of those last 8 months also wetter than normal. Scobey 4NW had the most rainfall with 7.05 inches, followed by 6.77 inches at Opheim 12SSE and 6.57 inches at Hinsdale 4SW. A few locations fell short of normal though, with the driest being 1.18 inches at Sidney 2S, 1.51 inches at Sidney, and 1.55 inches at Terry 21NNW.

There wasn't any hot weather at all until the last day or two of the month, and only a few days into the 80s during the month. Highs in the 60s were quite common with some unseasonably chilly highs only in the upper 40s and 50s around the 9th. This was led by Zortman, Malta 35S, Mosby 4ENE and Opheim 12SE with highs of only 48 degrees. Fort Peck had the hottest in the state with a high of 102 degrees on the 30th. Mildred 5N had 99 degrees, Terry and Glendive 98 degrees for highs. Most of the colder temperatures for the month happened on the 1st or 10th. Coldest was 31 degrees at Terry 21NNW, while Opheim12SE had 32 degrees, Zortman and Scobey 4NW 33 degrees.

Weather-wise, a significant flash flood in Valley County caused many homes to be inundated with water in the Glasgow area. The heavy rains also led to the Milk River at Glasgow hitting a new record stage of 34.08 feet. Flooding began downstream of Fort Peck Dam as the US Army Corps of Engineers started the first of many releases from the dam, setting a new record release of 65,000 cfs in mid June. Fort Peck Lake also reached a record pool elevation of 2252.3 feet, the previous record elevation was 2251.6 in 1975. Flooding was a problem on all area rivers and streams through the month, but finally by the end, all sites were below flood stage.

Severe thunderstorms had a late start this year, with the first reports of hail in the Malta area on June 2<sup>nd</sup>. June 17<sup>th</sup> brought damaging winds into the Plentywood area, and June 29<sup>th</sup> brought a brief tornado, and damaging hail and winds to the Glasgow area, and another tornado just north of Saco.

**July...** was close to normal for temperatures. Rainfall was generally a little above normal, but it varied quite a bit, too. The most rainfall was 5.45 inches at Savage, while 4.50 inches fell in Glasgow, and 3.64 inches at Sidney. Six locations had less than an inch. Winnett 6NNE only had 0.33 inches, Opheim 10N 0.45 inches, and Saco 0.56 inches.

There were several days of hot weather, but no prolonged heat waves. At the same time, there were also very few cool days either, as highs in the 80s very much predominated, and only a few 70s for highs. The coolest highs were 68 degrees at Zortman on the 24th, and 69 degrees at Malta 7E on the 11th, and 71 degrees at Wibaux on the 24th. Fort Peck did not have a single day with a high below 80 degrees. The hot spot for the month was 104 degrees at Saco on the 18th. Fort Peck, Grass Range 13 NE, Malta 7E and Flatwillow came in with highs of 102 degrees for the hot spots. Some very warm low temperatures in the 70s were also recorded at various times of the month, led by a low of 75 degrees at Malta7E on the 19th, while Mildred 5N, and

Terry had 74 degree lows on the 18th. Coolest for the month was 39 degrees at Opheim 10N on the 25th, while Content 3SSE had 40 degrees and a low of 41 degrees at Flatwillow.

Not a lot of severe weather occurred in July, but two big events caused some significant damage. The first was July 22<sup>nd</sup> in the Glasgow, Fort Peck and Nashua area where a hail swath at least 30 miles long was noticeable on satellite a few days later. The rain led to some flooding in Glasgow, and the large hail shattered windows and damaged vehicles in the area. The next big event was July 29<sup>th</sup>, when southern Richland County experienced not only a tornado, but a significant macroburst that had winds estimated to be around 100 mph and hail of 2.5 inches in size. This storm was significant enough to require a National Weather Service damage survey.

**August...** had temperatures that were close to normal for most of the month, but hot weather the last few days brought the month to above normal. Rainfall averaged near normal for the area as a whole, but showed a lot of variation with about half the reporting stations having less than an inch of rain for the entire month. Hinsdale 21SW reported no rain at all. Culbertson had only 0.25 inches, and Cohagen 0.26 inches. The wettest locations reporting were 3.33 inches at Terry 21NNW, 3.11 inches at Scobey 4NW, and 2.89 inches at Medicine Lake.

While 90s for highs were throughout the month, there were very few readings over 100 degrees. Fort Peck had 105 degrees on the first, Malta 7E 103 degrees on the 27th, while Cohagen and Flatwillow each had two 98 degree highs late in the month. The coolest days reported were highs of only 65 degrees at Vida 6NE on the 9th, 67 degrees at Opheim 12SE on the 19th, and 68 degrees at Opheim 10N on the 19th also. The month started with an unusually warm night in which many areas had lows in the 70s on the 1st. St Marie was warmest with a low of 75 degrees, while Nashua and Glendive had lows of 74 degrees. The coolest low temperatures observed were generally between the 17th and 20th. Opheim 12SE was the coolest with a low of 39 degrees. Opheim 10N and Port of Morgan had lows of 40 degrees, while Scobey 4NW came in with a 41 degree low.

August had a few days of severe weather, but not major damages or widespread events occurred.